



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,944	07/13/2006	Warren Gregory Smook	9031-1020	1485
<div>465                      7590                      09/02/2008</div> <div>YOUNG &amp; THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314</div>				
EXAMINER				
CHARLES, MARCUS				
ART UNIT		PAPER NUMBER		
3682				
MAIL DATE		DELIVERY MODE		
09/02/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/585,944

**Applicant(s)**

SMOOK, WARREN GREGORY

**Examiner**

Marcus Charles

**Art Unit**

3682

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 7-13-2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This is the first action relating to serial application number 10/585,944 filed 07-13-2006. Claims 17-36 are currently pending.

#### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

2. The drawings are objected to because;  
the drawing references are not clear so as to properly identify each element/figure of the figure.

In addition in fig. 4, there is a reference line that is not labeled. It appears that the line is pointing to fig. 5. The line should be labeled as V to indicate its relationship to fig. 5 as an expansion of the circular section of fig. 4.

In addition, fig.6 has a reference line (next to 32) that is not labeled. Fig. 1 has two lines, one pointing to fig. 2 indicating the reference 9, and the other branches off to fig. 3.

Figs 2 and 3 has labeled that cannot be recognized (see labels above 12).

It is not proper to box a number of different drawing together.

The drawing fails to show the multistage gear unit as set forth in claim 29 and the "taper roller" as in claim 28. Therefore, the unit and the tapered roller must be shown as claimed.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities:

The specification is replete with the legal phrase "said"; For example, see pages 2, 3, 4 and 5.

In page 5, lines 4 and 10, the parts of figs 1 and 4 should be labeled as II, III and V respectively.

The specification is missing the following sub-titles:

(I) CROSS-REFERENCE TO RELATED APPLICATIONS.

- (II) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (III) BRIEF SUMMARY OF THE INVENTION.
- (IV) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (V) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (VI) DETAILED DESCRIPTION OF THE INVENTION.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 25 and 34-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In claims 25 and 34-36, the specification does not disclose the edge region provides the biasing force and in the same instant having a biasing ring provided centrally between the end regions of the bearing surfaces. It would have been impossible for the zone in the end region to protrude above the surface while at the same time having a biasing ring provided centrally between the bearing surfaces surface.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 17-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the phrase confronting surface is unclear and confusing because the claim recites the bearing rollers are located between the confronting surfaces. Therefore, it is unclear as to what forms the confronting surface. It appears that the confronting surfaces are formed on the inner surface of the outer race

and the outer surface of the bearing. Therefore, it is unclear as to how the bearing rollers can be between themselves and the outer race. Without the rollers, there are no confronting surfaces. Therefore, it is not clear as to what exactly is the confronting surface.

In addition, in claim 17, line 3, "said bearing surfaces" lacks antecedent basis.

In claim 17, line 16, it is not clear as to what way in such a way referring too.

In claim 17, line 14, it is not clear what is being referred to as the adjacent surface region because the zone only protrudes above the surface of center surface region thereof. Note the adjacent surface region is opposite that of the zone and the zone does not protrude above the adjacent surface region.

In claim 25, the intended scope of the claim is unclear and confusing because claims 17 recite the biasing element is an edge region provides the biasing force and claim 25 recites the biasing elements comprises a biasing ring that is centrally between the end regions. Therefore, it appears that biasing is provided at the ends and the central region.

In claim 26 and 28, the term "type" renders the intended scope of the claim unclear because it is not clear as to what type is the term type referring to.

In claim 30, the intended scope of the claim is unclear because it is not clear if "an undercut" as in line 3 is the same as that of claim 18, if they are the same then there includes a double inclusion.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 17, 20-23, 26-27 and 31, understood, are rejected under 35

U.S.C. 102(b) as being anticipated by Kotzalas (US 2003/0210843) discloses the claimed invention including an outer race (2) having an inner raceway (10) forming confronting surfaces with an outer peripheral a plurality of biasing rollers (3), the inner raceway is deformed to provide a biasing force at the ends thereof to bias the rollers when under bearing load so that to the confronting surfaces of the roller and the outer or inner race are in contact; When in an unstressed or no load condition the biasing ends protrudes above or away front the confronting surface of the inner or outer race.

In claims 20-23 and 31, Kotzalas discloses the claimed invention.

In claims 26-27, the rollers are radial and cylindrical rollers.

10. In claim 31, it is apparent that the deformable component is a compressible material.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



12. Claims 28 and 29, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotzalas. Kotzalas does not disclose the roller is a tapered roller bearing and the roller bearing is mounted on a multistage gear unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to install the bearing of Kotzalas on a multistage gear unit, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikes*, 86 USPQ 70.

In addition, it would have been obvious to one of ordinary skill in the art to modify the cylindrical rollers of Kotzalas so that they are tapered rollers, since it is well known a tapered is preferred for compound loading and to provide of axial and radial load components.

***Allowable Subject Matter***

13. Claims 18-19, 24 and 32-33 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Citation***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note the prior art cited in attached PTO Form 892.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Marcus Charles*  
/Marcus Charles/  
Primary Examiner, Art Unit 3682

